

DECISION NOTICE
and
FINDING OF NO SIGNIFICANT IMPACT

Environmental Assessment
for
Grand Valley Spruce Beetle and Sudden Aspen Decline Treatments

U.S.D.A. Forest Service
Grand Mesa, Uncompahgre, and Gunnison National Forests
Grand Valley Ranger District
Mesa County, Colorado

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Spruce Beetle Outbreak Background

Currently, spruce beetle infestations on the Grand Mesa can be best described as well established and trending towards epidemic potential. Recent aerial surveys show that beetle populations are impacting many areas of the Grand Mesa; however the surveys do not show the full extent of the outbreak. The Engelmann spruce / subalpine fir forest type on the Grand Valley Ranger District (GVRD) is extensive, covering approximately 86,000 acres most of which is located on the Grand Mesa.

The GVRD has been implementing sanitation and salvage treatments on the Grand Mesa for the past 12 years. These treatments, in response to spruce beetle outbreaks, have been conducted in an attempt to keep beetle activity at endemic levels and slow the spread into adjacent stands.

Sudden Aspen Decline (SAD) Background

The health condition of numerous aspen stands is degrading due to Sudden Aspen Decline (www.fs.fed.us/r2/thm). SAD is attributed, in part, to the following group of biotic agents: Cytospora stem canker (*Valsa sordida*), aspen bark beetles (*Trypophloeus populi* and *Procryphalus mucronatus*), poplar borer (*Saperda calcarata*), and bronze poplar borer (*Agrius liragus*), all of which typically affect stressed trees. SAD seems to primarily affect mature aspen located at lower elevations on southern or western aspects. Research indicates that SAD was initiated in part due to severe drought in 2002.

Recent aerial surveys have shown approximately 8% of aspen stands on the district being affected by SAD. Aerial surveys are very useful in identifying general areas affected by SAD; however ground surveys are often needed in potential treatment areas to determine the actual extent of declining stands.

In conjunction with commercial and non-commercial removal methods, woody biomass markets may be pursued as an option thereby allowing treatments in areas which were once considered not feasible.

DECISION

I have reviewed the EA and Project Record, including Response to Comments (Appendix A), the Biological Evaluation, and the Biological Assessment. It is my decision to implement the proposed action (Alternative 1) as described below.).

The proposed action will utilize commercial and non-commercial treatments of spruce beetle-infested and sudden aspen decline affected stands using timber sale contracts, stewardship contracts, permits, and other methods (i.e., prescribed burning, trap trees, hydro-axing, in-house crews etc.). To access treatment units and accommodate the hauling of logs, up to one mile of temporary road may be constructed. These temporary roads will be closed and/or obliterated after the timber sale is complete.

A majority of the acreage treated in spruce beetle affected areas would involve sanitation and salvage operations. Due to the anticipated mortality levels, the Forest Service is proposing an extensive approach, including increased removal of dead, dying and diseased trees.

The proposed action will clearly focus on areas heavily impacted by spruce beetles which

Management to regenerate aspen would also include individual contracts and permits limited to areas which are impacted by SAD. The treatments may include commercial timber harvesting and non-commercial operations, such as prescribed fire, mastication operations, hand felling and other management techniques. Operations will focus on areas where there is a good likelihood of successfully regenerating the clone (Table 2).

<ul style="list-style-type: none"> • Table 2. Priority treatment guidelines for sudden aspen decline (SAD) affected areas*. 	
<ul style="list-style-type: none"> • Rank 	<ul style="list-style-type: none"> • Condition
<ul style="list-style-type: none"> • 1 	<ul style="list-style-type: none"> • Clones which have 15 to 60% die-back as a result of SAD.
<ul style="list-style-type: none"> • 2 	<ul style="list-style-type: none"> • Clones with 60% to 70% dieback or less than 15% dieback if harvesting can be done without damaging root systems and existing regeneration. In clones with less than 15% dieback, harvesting would only occur if it is apparent that no improvement in crown condition is occurring (by silviculturist).
<ul style="list-style-type: none"> • 3 	<ul style="list-style-type: none"> • Clones which have greater than 70% die-back as a result of SAD, would be treated only by non-commercial means such as firewood gathering, cutting trees with Forest Service crews or service contracts, or with prescribed burning.
<ul style="list-style-type: none"> • * All priority treatments will only occur outside inventoried roadless areas. 	

In spruce beetle affected stands, skid trail and landing locations will be located to avoid advanced regeneration to the greatest extent possible; however it is inevitable that some advanced regeneration will be lost from harvesting activities. This will be kept to a minimum by wider skid trail spacing and also by the silviculturist and wildlife biologist working with Forest Service Representative (FSR) to conserve as much natural regeneration as possible. Harvesting equipment operating off trails will be instructed to avoid natural regeneration and the FSR and silviculturist will continually evaluate this to assure compliance.

Design Criteria: In addition to the standard direction found in timber sale contract provisions, the Watershed Conservation Practices Handbook for Best Management Practices (FSH 2509.25 Chapter 2) and standards and guidelines in the Forest Plan (pages III-9a through III-188), I have decided to implement the following project design criteria which apply to treatments related to the project.

Air Quality

- All seed and materials used for re-vegetation and reclamation (straw, mulches, matting, etc.) will be approved by the Forest Service and certified weed-free only.

Other Facilities and Special Uses

- Timber harvesting activities will be conducted in such a manner as to protect fences, ditches, structures, and other facilities within the analysis area.
- The Forest Service would ensure that private property boundary lines are located and/or marked.
- In order to identify the locations of specific use facilities and concerns the permittees themselves might have concerning the harvesting activities, the Forest Service would coordinate with those permittees early in the process once a specific timber sale area is identified.

Range

- All existing structural range improvements will be protected during timber sale activities.
- Structural range improvements will be immediately repaired by the timber sale operator, to Forest Service standards, if damage occurs due to timber sale activity. Damage to cattleguards on access roads outside the sale area boundary will be included when it is determined to have been caused by timber sale activities.
- During the grazing season (varies from 5/15 – 11/15, depending on allotment and location), gates in existing fences between pastures or allotments will be kept closed during timber sale activities. If new gates are required in existing fences as a result of timber sale activities, the timber sale operator would install a temporary gate or cattleguard at the appropriate location.
- The Timber Sale Administrator would provide periodic updates to the Grand Valley District Rangeland Management Staff during the grazing season on all timber sale operation activities that could affect management of the grazing allotment.
- Temporary fencing will be implemented as necessary to protect aspen regeneration from grazing.

Recreation

- Temporary roads, which overlay designated cross-country ski trails, OHV / ATV trails, bike trail, or hiking trails will be obliterated to the width of the trail prior to logging operations. The trail corridor will be free of slash and debris. Temporary roads, which use an existing obliterated road, will be obliterated to the condition prior to logging operations.
- During snowplowing operations, the timber purchaser would leave no less than four inches of snow on the roads and would provide a smooth travel surface. Roads will be plowed wide enough so that snowmobiles and log trucks can pass or turnouts will be plowed open. When snowplowing creates berms along designated snowmobile trails or at the junctions of designated snowmobile trails, the purchaser would remove the berms so that snowmobile riders can safely enter and exit trails.
- Winter operations would not occur in designated ski areas from November 15th - May 15th.

needed, appropriate water influence zone (WIZ) boundaries and prescriptions developed to protect or enhance stream health, riparian, or wetland conditions.

- Ground disturbance will be minimized to the extent possible within the water influence zone (WIZ). At least one end of the log will be suspended during skidding and skid trails would not be located within 50 feet of any stream or wetland.
- Temporary road alignments will be reviewed and appropriate BMP's identified prior to construction or reconstruction.
- Structures required for temporary road crossings of channels shall be designed to prevent the restriction of expected flows, will be removed prior to snowmelt high flows, and permanently removed during obliteration.
- Temporary roads and log landings will be de-compacted and seeded at the close of operations to facilitate infiltration.
- During the preparation of individual sales, wetlands, riparian areas, and poorly or very poorly drained soils found in valley floor or topographic depressions (soil type 127) will be identified and appropriate water influence zone (WIZ) boundaries and prescriptions developed to protect the wetland and riparian related resources.
- Operation of heavy equipment associated with timber harvest activities and mechanical fuels treatments will avoid wet soil types and wetlands.
- All perennial and intermittent streams, lakes, reservoirs, designated wetlands, and wet soil types will be shown on the sale area map. Designated main skid trails will be required in units that are associated for each tractor harvest unit to minimize the area subject to soil disturbance. The area detrimentally impacted by tractor yarding will be limited to less than 15 percent of each cutting unit.
- A special management zone extending up to a total of 300 feet may be established around functioning fens. The extent of this zone will be determined and documented during road location and unit layout.

Slash Treatment Operations

- Opportunities for biomass harvesting may result in removal of most logging debris; however the Forest Plan minimum of 10 tons of residual biomass will be required to maintain soil productivity.

Spruce Beetle Prevention and Treatment (Control)

- Within all treatment units: In order to prevent population increases in Engelmann spruce beetle, felled spruce shall be removed from the sale area by no later than October 31 of the year following felling.
- All unutilized spruce material, 7 (eight) inches or larger in large end diameter, 8 (eight) feet or more in length, and with 50% (fifty percent) or more tight bark, shall be yarded to landings or other locations agreed to in writing and piled so that it can be burned by Forest Service within one year of the timber being cut. Unutilized spruce material 8 (eight) inches or larger in large end diameter, with 50% (fifty percent) or more tight bark, and less than 8 (eight) feet in length, shall be either (1) piled at landings; (2) bucked to 18 (eighteen) inches or shorter lengths, or (3) have the bark peeled on two sides.
- At the landing, cull spruce logs exceeding 8 (eight) inches large end diameter with 50% (fifty percent) or more tight bark, and part to all of the other slash accumulated

a ¼-mile buffer placed around all active nests until the young have fledged or until the Wildlife Biologist determines that the activities would not disturb the nest and nesting pair.

- Wet areas (seeps, ponds, and springs) within harvest units will be avoided by leaving small islands of leave trees to prevent disturbance of these areas.
- Adjacent to fish-bearing streams or fish-bearing lakes: no commercial removal of standing trees will be permitted within 50 feet of reservoirs, natural lakes, perennial and intermittent streams in order to provide future recruitment of coarse woody debris; maintain stream or lakeside shading; and minimize wind throw potential.

Project Implementation Monitoring: Implementation of the Grand Valley Spruce Beetle and Sudden Aspen Decline Treatments will be completed and monitored by qualified Forest Service personnel such as silviculturists, timber sale administrators, engineering representatives, pre-sale foresters, timber sale preparation crews, hydrologists, soil scientists, and wildlife biologists. Implementation will be documented in such reports as stand prescriptions, marking guides, marking checks, cruise designs, appraisal and contract reports, timber sale administration inspection reports, wildlife survey reports, site-visit reports, and project design checklists. The District Ranger would review and approve project development after completion of each major step of implementation (i.e. complete certification reports for timber sale gates 1 to 4).

Specific project implementation monitoring includes:

- The timber sale administrator would monitor timber sale contracts and enforce contract provisions to protect resources in the sale area from adverse impacts, according to Forest Service policy.
- The timber sale administrator would locate and monitor temporary road locations, road drainage, and containment of sediment. Inspections will be ongoing during road construction; and road maintenance and erosion control monitoring would continue throughout the life of timber sale contract, according to Forest Service policy.
- The rangeland management specialist would monitor disturbed areas, such as roads, landings, and skid trails for at least two years for noxious weeds, after the disturbance occurred, which would include one inspection per year near the end of the growing season.
- Regeneration success will be monitored in treatment units. First, third, and fifth year regeneration surveys will be conducted by the timber staff, as required by Forest Service policy. If it is concluded that additional cultural treatments are required, these treatments will be scheduled by the silviculturist. In addition, monitoring for wind throw within the sale area will be completed as much as possible, throughout the five year period following harvest activities.
- The hydrologist will monitor fens and wetlands, if applicable to a specific treatment area. Inspections would occur yearly during operations, and yearly (for two years) after operations are completed.

The environmental assessment was sent out for a 30-day public comment period on August 20, 2011 which lasted until September 19, 2011. Two comments were received. The comments and responses to these comments are included in Appendix A, attached to this DN/FONSI.

All public comment letters and responses to these comments are located in the project record. Using the comments from the public and other agencies, the interdisciplinary team developed a list of issues to address.

ALTERNATIVES CONSIDERED

A total of three Alternatives were considered in the EA. These alternatives (Alternatives 1, 2 and 3) were considered in detail in the EA because the two action alternatives addressed the purpose and need, significant issues, met NEPA regulations, and met Forest Plan management objectives, and a “No Action” alternative was considered as required by law. The following is a brief summary of the alternatives related to Leroux Creek Aspen Management project.

Alternative 2

NEPA requires the consideration of a “No Action” alternative (40 CFR 1502.14d) where none of the proposed activities identified under the proposed action would occur. This alternative provides a baseline for comparison to aid in determining the relevance of issues and effects of the proposed projects. Under Alternative 2, no timber sale or other management activities would occur. This alternative would result in no additional incremental effects relative to the issues previously described. For example, there will be no project-induced effects to water quality, special-status species, or visual resources.

Alternative 3

Under this alternative, the area of spruce beetle affected stands treated would have been limited to approximately 400 acres per year and the area of sudden aspen decline affected stands treated will be limited to approximately 120 acres. These acreages could include any combination of commercial and non-commercial treatment methods.

This alternative would be identical to the proposed action other than the restrictions on acreage treated per year. Under this alternative, as with the proposed action, the interdisciplinary team would evaluate individual proposed treatment sites before the sale or treatment is laid out and implemented so that any specific measures can be prescribed if needed.

FINDING OF NO SIGNIFICANT IMPACTS

I find that implementing the proposed action (Alternative 1) will not have a significant effect on the human environment and is therefore excluded from documentation in an Environmental Impact Statement. This determination is based on the analysis of environmental effects documented in the EA (pages 16 – 73). The following discussion focuses on factors I considered in determining what constitutes “significant” effects on the environment.

1. Timber management activities will result in some disturbances to water, soils, visuals, wildlife and vegetation. I find these impacts to be not significant because

10. I find the proposed action complies with Federal, State and local laws and requirements imposed for the protection of the environment and therefore, there is not a significant impact (EA pages 16 – 73).

FINDINGS REQUIRED BY OTHER LAWS AND REGULATIONS

Forest Plan Consistency: The proposed action is consistent with the overall management direction provided within the 1991 Forest Plan, as amended. Factors that were considered in determining whether this project is consistent with the Forest Plan are as follows:

1. The selected alternative assists in reaching multiple use objectives listed in Chapter III, pages 5 - 8 of the Forest Plan (EA pages 2-4).
2. The selected alternative responds directly to Forest Plan direction listed in Chapter III, pages 2 - 4 (EA pages 3, 16 – 73). The planned activities will not detract from or jeopardize any of the Forest Plan goals.
3. The selected alternative is consistent with Forest Plan Management Direction, Standards and Guidelines, and with the following Management Area Prescription (Forest Plan, Chapter III, pages 86 – 202).

National Forest Management Act Consistency: The proposed action will harvest timber from National Forest System lands. Under 16 U.S.C. 1604(g) (3) (E), I find that the proposed action meets the following management requirements:

1. Soil, slope, or other watershed conditions will not be irreversibly damaged (EA pages 61-69);
2. There is assurance that the lands can be adequately restocked within five years after final regeneration harvest (EA pages 48-56);
3. Streams, streambanks, shorelines, lakes, wetlands, and other bodies of water are protected from detrimental changes in water temperatures, blockages of water courses, and deposits of sediment where harvests are likely to seriously and adversely affect water conditions or fish habitat (EA pages 25-47,61-69);
4. The harvesting system to be used was not selected primarily because it will give the greatest dollar return or the greatest unit output of timber (EA page 48-56); and

Under 16 U.S.C. 1604 (g)(3)(F), I find that the proposed action, meets the following requirements:

5. Sanitation and salvage and clear-cut harvests proposed for treating timbered stands are appropriate to meet the objectives and requirements of the Forest Plan (EA pages 48-56).
6. An interdisciplinary review has been completed and the potential environmental, biological, aesthetic, engineering, and economic impacts have been assessed on areas of the Grand Valley District where treatments may occur and the cutting

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IMPLEMENTATION DATE

If no appeal is received, implementation of this decision may occur on, but not before, the fifth business day following the close of the appeal filing period.

CONTACT PERSON

For additional information concerning this decision or the Forest Service appeal process, contact Kevin H. Kyle, Silviculturist, 2777 Crossroads Blvd, Unit 1, Grand Junction, Colorado 81506 or by phone at 970-263-5829.



CONNIE CLEMENTSON

Date

Grand Valley District Ranger